



Bonita Creek, upstream of the Gila River, northeast of Safford, Arizona.

The Upper Gila Watershed

The Upper Gila watershed in Arizona is defined by the Gila River drainage area, from the location where the river enters from New Mexico, to Coolidge Dam (San Carlos Reservoir). Perennial flow is limited to the Gila River above Safford, the San Francisco River and its tributaries, Eagle Creek, portions of Bonita Creek, the San Carlos River, and short segments of tributaries on Mount Graham and the Chiricahua Mountains.

This 7,354 square mile watershed is occupied by only 51,500 people (2000 census), mostly living in the Safford and Clifton areas. Land ownership is approximately: 10% private land, 15% state land, 47% federal land, and 28% Tribal lands. In the Safford area, irrigated agriculture uses a high percentage of the Gila River flow. Outside of this area, land use is primarily open range grazing and recreation, with a minor amount of forestry in the national forests. A major mining facility is located in the Clifton-Morenci area along the San Francisco River. Along with the Gila Box Riparian National Conservation Area established in 1990, five wilderness areas and a wilderness study area are located in this watershed and have restricted land uses.

Elevations range from 10,028 feet (above sea level) on Mount Graham to 2,990 feet at Coolidge Dam. Except for a few sky islands (mountains located in the desert), most of the watershed is below 5,000 feet, with low desert flora and fauna and warmwater aquatic communities where perennial waters exist.

The assessment – Assessments were completed for 26 stream reaches and four lakes in this watershed. Of the 310 stream miles assessed, 70 miles were attaining all uses (four reaches) and 42 miles (4 reaches) were assessed as impaired or not attaining a use. Of the 168 lake acres assessed, none were assessed as attaining all uses and 120 acres (one lake) were assessed as impaired or not attaining a use. All others were inconclusive or attaining some uses.

A watershed assessment map follows on the next page, illustrating stream and lake assessments by category. The Upper Gila **monitoring table (Table 21)** following the map summarizes the water quality data used in the assessment. It is followed by the **assessment table (Table 22)**, which bridges current assessments with past assessments and impaired water identification. Important to note in this table are comments regarding previous 303(d) lists (what has been added and removed), category designations (1 through 5), references to potential actions by EPA, and status of TMDLs.

Detailed information on how to use these tables is found at the beginning of this chapter (p. IV-1). Assessment methods and criteria can be found in Chapter III.

Upper Gila Watershed Assessment for Streams & Lakes

- Legend**
- Surface Water Sampling Sites
 - Assessed Streams - Category**
 - 1 - Attaining All Uses
 - 2 - Attaining Some Uses
 - 3 - Inconclusive
 - 5 - Impaired
 - Assessed Lakes - Category**
 - 2 - Attaining Some Uses
 - 3 - Inconclusive
 - 4 - Not Attaining
 - Major Highways
 - Major Streams
 - Lakes
 - Indian Reservations
 - HUC Watershed Boundaries
 - Upper Gila Watershed Boundary
 - Cities

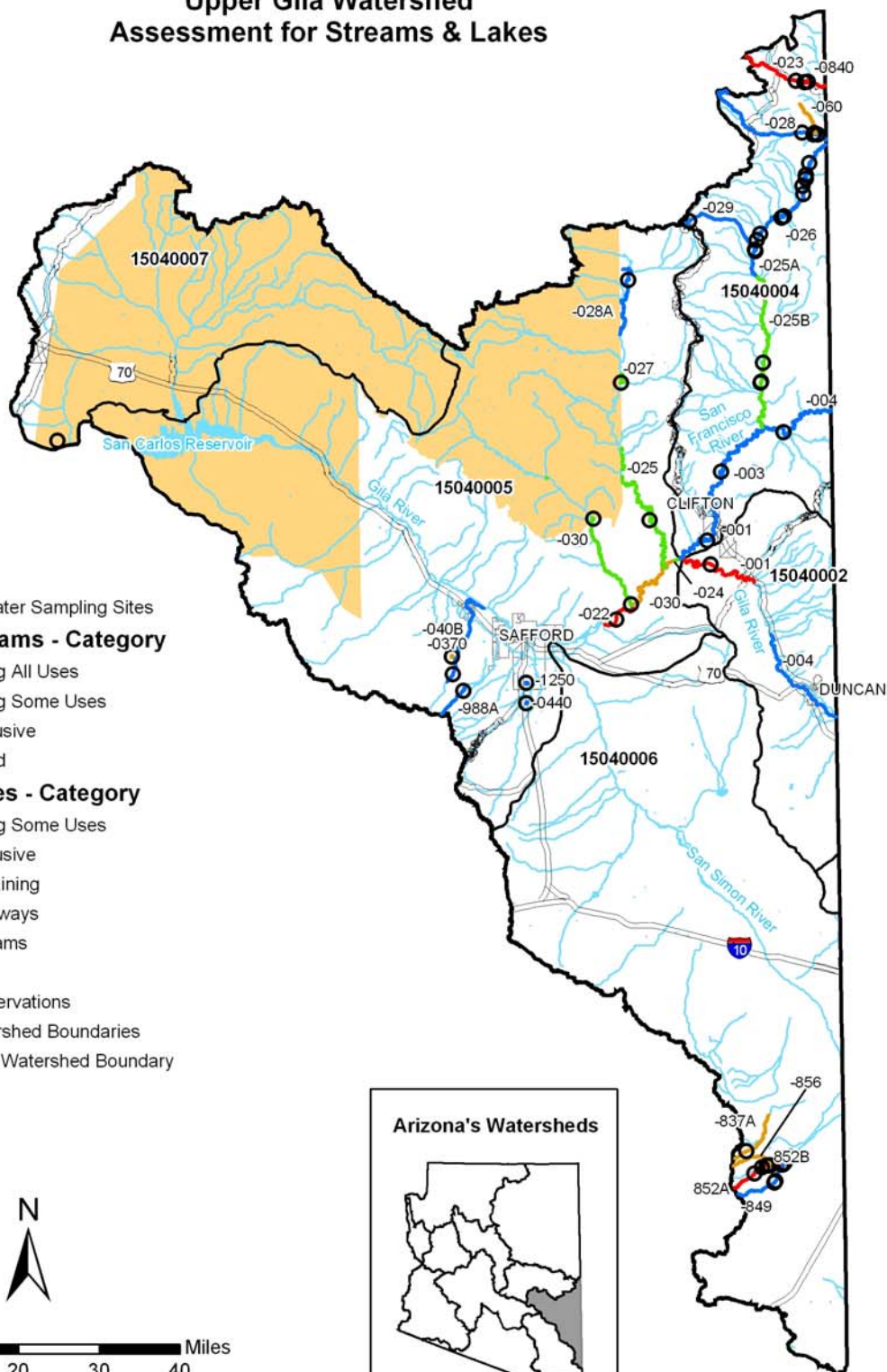
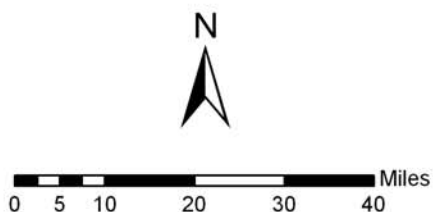


Figure 23. Watershed monitoring and assessments

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
STREAM MONITORING DATA								
Ash Creek Unnamed tributary at 32 45 37 / 109 52 22 - Gila River AZ15040005-040B A&Ww, FC, FBC, AgL	ADEQ Ambient Monitoring At Forest Road #307 UGA1H008.62 100830	1999 - 1 full suite 2000 - 2 partial suites 2002 - 2 full suites	No exceedances					Lab reporting limits for the dissolved metals (cadmium, copper, and zinc) were too high to use results for assessment.
	Summary Row A&Ww Inconclusive FC Attaining FBC Attaining AgL Attaining	1999 - 2002 5 sampling events	No exceedances					ADEQ collected 5 samples in 1999 - 2002. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (cadmium, copper, and zinc).
Blue River New Mexico border - KP Creek AZ15040004-026 A&Wc, FC, FBC, Agl, AgL	ADEQ TMDL Program Bobcat Flat (Site 5) UGBLR043.03 101184	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Lazy YJ Ranch (Site 6) UGBLR042.69 101185	2001 - 4 field	Turbidity NTU	10 (A&Wc)	<1 - 13	1 of 4		
	ADEQ TMDL Program Below Nolan Creek (Site 7) UGBLR041.93 101186	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Above Blue Crossing (Site 8) UGBLR039.84 101187	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Below Blue Crossing (Site 9) UGBLR039.67 101188	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Above Balke Crossing (Site 10) UGBLR035.10 101189	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Below Balke Crossing (Site 11) UGBLR034.75 101190	2001 - 4 field	No exceedances					
	ADEQ Biocriteria & Ambient Monitoring Below Jackson Box (upper) UGBLR033.04 100419	1999 - 1 partial suite 2000 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.0 - 7.2 (84 - 96%)	2 of 4		
	ADEQ TMDL Program Above Box (Site 12) UGBLR030.42 101191	2001 - 4 field	No exceedances					

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	ADEQ TMDL Program Below Box (Site 13) UGBLR029.50 101192	2001 - 4 field	No exceedances					
	Summary Row	1999-2001	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.0 - 7.5 (84 - 102%)	2 of 22	Attaining	ADEQ collected 40 samples in 1999-2001, primarily in support of a turbidity investigation. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: total boron, dissolved metals (copper, cadmium, and zinc), and total metals (mercury, manganese, copper, and lead).
	A&Wc Inconclusive FC Inconclusive FBC Attaining Agl Inconclusive AgL Inconclusive	40 samples 8 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	<1 - 13	1 of 40	Attaining	
Blue River KP Creek - Strayhorse Creek AZ15040004-025A A&Wc, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Below KP Creek UGBLR021.95 100835	1999 - 1 partial suite 2000 - 3 partial suites	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Attaining Agl Inconclusive AgL Inconclusive	1999 - 2000 4 sampling events	No exceedances					ADEQ collected 4 samples in 1999 - 2000. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: total boron, dissolved metals (copper, cadmium, and zinc), and total metals (mercury, manganese, copper, and lead).
Blue River Strayhorse Creek - San Francisco River AZ15040004-025B A&Ww, FC, FBC, Agl, AgL	ADEQ TMDL Program Above Fritz Ranch UGBLR008.07 100420	2001 - 3 field	No exceedances					
	ADEQ Fixed Station At Juan Miller Road UGBLR005.68 100398	1998 - 1 full suites 1999 - 5 full suites 2000 - 4 full suites 2000 - 4 full suites 2001 - 4 full suites	No exceedances					
	ADEQ TMDL Program Near Clifton UGBLR005.59 100770	2001 - 4 field	No exceedances					
	Summary Row A&Ww Attaining FC Attaining FBC Attaining Agl Attaining AgL Attaining	1998-2002 25 samples 20 sampling events	No exceedances					ADEQ collected 25 samples at 3 sites from 1998-2002. Assessed as "attaining all uses."
Bonita Creek Park Creek - Gila River AZ15040005-030 A&Ww, FC, FBC, DWS, AgL Unique Water	ADEQ Ambient Monitoring Below Indian Reservation boundary UGBON011.31 100188	1999 - 1 full suite 2000 - 1 full + 2 partial suites	No exceedances					

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	ADEQ Ambient Monitoring Above Gila River UGBON000.20 100185	1999 - 1 partial suite 2000 - 1 full + 3 partial suites 2001 - 1 full + 1 partial suite 2002 - 1 full suite	Turbidity (former standard) NTU	15 (Unique Water) (A&Ww)	<1 - 49	1 of 8		
	Summary Row A&Ww Attaining FC Attaining FBC Attaining DWS Attaining AgL Attaining	1998-2002 12 samples 11 sampling events	Turbidity (former standard) NTU	15 (Unique Water) (A&Ww)	<1 - 49	1 of 11	Attaining	ADEQ collected 12 samples at 2 sites in 1998-2002. Assessed as “attaining all uses.”
Campbell Blue Creek headwaters - Blue River AZ15040004-028 A&Wc, FC, FBC, AgL	ADEQ TMDL Program Above Turkey Creek (site 2) UGCMB002.30 101181	2001 - 4 field	No exceedances					Lab reporting limits for some dissolved copper samples were too high to use results for assessment.
	ADEQ Ambient Monitoring Above K E Canyon UGCMB002.16 100522	1999 - 1 full suite 2000 - 2 full + 1 partial suites	No exceedances					
	ADEQ TMDL Program Below Turkey Creek (site 3) UGCMB001.46 101182	2001 - 4 field	No exceedances					
	ADEQ TMDL Program Above Dry Blue (site 4) UGCMB000.16 101183	2001 - 4 field	No exceedances					
	Summary Row A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining	1999-2001 16 samples 8 sampling events	No exceedances					ADEQ collected 16 samples at 4 sites from 1999-2001. Assessed as “attaining some uses” and added to the Planning List due to missing core parameter: dissolved copper.
Cave Creek headwaters - South Fork of Cave Creek AZ15040006-852A A&Wc, FC, FBC, Agl, AgL Unique Water	ADEQ Unique Waters Program Above Herb Martyr Campground UGCAV009.86 101108	1998 - 2 partial suites 1999 - 1 partial suite 2001 - 1 full suite 2002 - 1 full suite	No exceedances					
	ADEQ Unique Waters Program Above summer homes along FS Road 42A UGCAV008.92 101107	1998 - 1 partial suite 1999 - 1 partial suite	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.4 - 8.1 (81 - 92%)	1 of 2		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
	ADEQ Unique Waters Program Above SW Research Station UGCAV008.49 101106	1998 - 2 partial suites	No exceedances					

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	ADEQ Unique Waters Program Above South Fork of Cave Creek UGCAV007.70 101105	1998 - 2 partial suites	No exceedances					
	ADEQ Unique Waters Program Below North Fork Cave Creek UGCAV007.64 100933	1998 - 1 partial suite 1999 - 1 full + 1 partial suite 2000 - 3 full + 1 partial suite 2001 - 1 full + 1 partial suite 2002 - 1 full suite	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.2 - 9.3 (78 - 107%)	1 of 10		Stream is dominated by thermal spring at low flows (and high total dissolved solids). Dissolved oxygen is naturally below surface water standards in such spring recharge areas. Therefore, low dissolved oxygen not included in final assessment. Lab reporting limits for 8 other selenium samples were too high to use results for assessment.
			Selenium (total) µg/L	2 (A&Wc chronic)	<5 - 8.8	2 of 2		
			Turbidity (former standard) NTU	10 (A&Wc)	<1-15	1 of 10		
	Summary Row A&Wc Impaired FC Attaining FBC Attaining Agl Attaining AgL Attaining	1998-2002 21 samples 10 sampling events	Selenium (total) µg/L	2 (A&Wc chronic)	<5 - 8.8	2 of 2 events	Impaired	ADEQ collected 21 samples at 5 sites in 1998-2002. Assessed as “impaired” due to selenium exceedances.
			Turbidity (former standard) NTU	10 (A&Wc)	<1 - 15	1 of 18	Attaining	
Cave Creek South Fork of Cave Creek - USFS boundary AZ15040006-852B A&Ww, FC, FBC, Agl, AgL Unique Water	ADEQ Unique Waters Program Below South Fork of Cave Creek UGCAV007.46 101104	1998 - 2 partial suites	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	257	1 of 1		Exceedance occurred during very high flow (normally <1 cfs, flow at 65 cfs).
	ADEQ Unique Waters Program Below Coronado Ranger Station UGCAV006.55 100937	1998 - 2 partial suites 1999 - 1 full suite 2000 - 1 full + 2 partial suites 2001 - 2 full suites	Turbidity (former standard) NTU	50 (A&Ww)	<1-64	1 of 8		Exceedance occurred during very high flow (normally <1 cfs, flow at 65 cfs).
	Summary Row A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining	1998-2001 10 samples 8 sampling events	<i>Escherichia coli</i> CFU / 100 ml	235 (FBC)	257	1 of 8 events (None in the last 3 years of sampling)	Attaining	ADEQ collected 10 samples at 2 sites in 1998-2001. Assessed as “attaining some uses” and placed on the Planning List due to exceedance of the former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
			Turbidity (former standard) NTU	50 (A&Ww)	< 1 - 64	1 of 9	Inconclusive (see comment)	
Cave Creek, North Fork headwaters - Cave Creek AZ15040006-856 A&Wc, FC, FBC (tributary rule)	ADEQ Unique Waters Program Above Cave Creek UGNVC000.03 101129	1999 - 1 partial suite	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.3 (73%)	1 of 1		Low dissolved oxygen due to naturally occurring ground water upwelling at thermal spring, and not anthropogenic causes. Not included in the final assessment.
	Summary Row A&Wc Inconclusive FC Inconclusive FBC inconclusive	1999 1 sampling event	No exceedances					Insufficient monitoring data to assess.

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					COMMENTS
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	
Cave Creek, <u>South Fork</u> headwaters - Cave Creek AZ15040006-849 A&Wc, FC, FBC, Agl, AgL Unique Water	ADEQ Biocriteria Program Above South Fork Campground UGSCV002.45 100640	1998 - 1 partial suite	No exceedances					
	ADEQ Ambient Monitoring Above South Fork Campground UGSCV002.26 100639	1998 - 1 full + 1 partial suite 1999 - 2 full suites 2000 - 2 full + 2 partial suites 2001 - 2 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	3.6 - 8.8 (40 - 98%)	5 of 10		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 240	1 of 9		Exceedances coincided with very high flow (normally < 1 cfs, flow at 22 cfs). Pristine watershed.
			Turbidity (former standard) NTU	10 (A&Wc)	<1 - 36	1 of 10		
	ADEQ Unique Waters Program Above confluence with Cave Creek UGSCV000.12 101109	1998 - 1 full + 1 partial suite	No exceedances					
	Summary Row A&Wc Attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1998 - 2001 13 samples 10 sampling events	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 240	1 of 10 events (in 2000)	Inconclusive	ADEQ collected 13 samples at 3 sites in 1998 - 2001. Assessed as "attaining some uses" and placed on the Planning List due to <i>Escherichia coli</i> exceedance.
			Turbidity (former standard) NTU	10	< 1 - 36	1 of 13	Attaining	
Eagle Creek headwaters - unnamed tributary at 33 23 24 / 109 29 35 AZ15040005-028A A&Wc, FC, FBC, DWS, Agl, AgL	ADEQ Ambient Monitoring Above Honeymoon Campground UGEAG035.99 100535	1999 - 1 full suite 2000 - 1 full + 2 partial suites	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Attaining DWS Inconclusive Agl Inconclusive AgL Inconclusive	1999-2000 4 sampling events	No exceedances					ADEQ collected 4 samples in 1999-2000. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: total boron, dissolved metals (copper, cadmium, and zinc), and total metals (mercury, arsenic, chromium, lead, manganese, and copper).
Eagle Creek Willow Creek - Sheep Wash AZ15040005-027 A&Ww, FC, FBC, DWS, Agl, AgL	ADEQ Ambient Monitoring Above Sheep Wash Crossing UGEAG023.34 100536	1999 - 1 full suite 2000 - 1 full + 2 partial suites 2002 - 1 full suite	No exceedances					
	Summary Row A&Ww Attaining FC Attaining FBC Attaining DWS Attaining Agl Attaining AgL Attaining	1999 - 2002 5 sampling events	No exceedances					ADEQ collected 5 samples in 1999-2002. Assessed as "attaining all uses."

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
Eagle Creek Sheep Wash - Gila River AZ15040005-025 A&Ww, FC, FBC, DWS, Agl, AgL	ADEQ Ambient Monitoring Below Gold Gulch @ Morenci UGEAG006.05 100806	1999 - 1 full suite 2000 - 1 full + 2 partial suites 2002 - 1 full suite	No exceedances					
	Summary Row A&Ww Attaining FC Attaining FBC Attaining DWS Attaining Agl Attaining AgL Attaining	1999 - 2002 5 sampling events	No exceedances					ADEQ collected 5 samples in 1999-2002. Assessed as "attaining all uses."
East Turkey Creek headwaters - tributary at 31 58 22 / 109 12 17 AZ15040006-837A A&Wc, FC, FBC, AgL	ADEQ Biocriteria Program Above Forest Road 42 UGETK007.70 100545	1998 - 1 partial suite	No exceedances					
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive	1998 1 sampling event	No exceedances					Insufficient monitoring data to assess.
Frye Canyon Creek headwaters - Frye Mesa Reservoir AZ15040005-988A A&Wc, FC, FBC, DWS, AgL	ADEQ Ambient Monitoring First crossing of Trail #36 UGFRY007.00 100720	1999 - 1 full suite 2000 - 2 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.74 - 7.76 (78-88%)	1 of 3		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Attaining DWS Inconclusive Agl Inconclusive	1999 - 2000 3 sampling events	No exceedances					ADEQ collected 3 samples in 1999-2000. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (copper, cadmium, and zinc) and total metals (mercury, arsenic, chromium, lead, and copper).
Gila River NM border - Bitter Creek AZ15040002-004 A&Ww, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Duncan at New Mexico border UGGLR205.35 100808	1999 - 1 full suite 2000 - 1 full suite 2002 - 2 full suites	Selenium (total) µg/L	2 (A&Ww chronic)	<5 - 5.8	1 of 1		Lab reporting limits for 4 additional samples were too high to use results for assessment.
	Summary Row A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining	1998 - 2002 4 sampling events	Selenium (total) µg/L	2 (A&Ww chronic)	<5 - 5.8	1 of 1 event	Inconclusive	ADEQ collected 4 samples in 1998 - 2002. Assessed as "attaining some uses" and placed on the Planning List due to selenium exceedance.
Gila River Skully Creek - San Francisco River AZ15040002-001 A&Ww, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Above Old Safford Bridge UGGLR197.26 100809	1999 - 1 full suite 2000 - 1 full + 2 partial suites 2001 - 1 full suite 2002 - 5 full suites	Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	5.6 - 10.1 (81-130%)	1 of 9		Exceedance occurred during higher flow event.
			Lead (total) µg/L	15 (FBC)	<5 - 110	1 of 8		Exceedance occurred during higher flow event.
			Selenium (total) µg/L	2 (A&Ww chronic)	<5 - 7	3 of 3		Reporting limits of 7 other selenium samples were too high to use results for assessment.

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Ww Impaired FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1999 - 2002 10 sampling events	Turbidity (former standard) NTU	50 (A&Ww)	3 - > 999	2 of 10		Both exceedances coincide with higher flow events. (Note that 4 SSC samples in 2002 did not exceed standards.)
			Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	5.61 - 10.1 (81-130%)	1 of 9	Inconclusive	ADEQ collected 10 samples 1998-2002. Assessed as "impaired" due to chronic selenium exceedances.
			Lead (total) µg/L	15 (FBC)	<5 - 110	1 of 8	Inconclusive	Placed on the Planning List due to lead exceedance and low dissolved oxygen.
			Selenium (total) µg/L	2 (A&Ww chronic)	<5 - 7	3 of 3 events	Impaired	
			Turbidity (former standard) NTU	50 (A&Ww)	3 - > 999	2 of 10	Attaining	
Gila River Bonita Creek - Yuma Wash AZ15040005-022 A&Ww, FC, FBC, Agl, AgL	USGS Fixed Station #09448500 Solomon above Safford Valley UGGLR188.98 100729	1998 - 6 full suites 1999 - 6 full suites 2000 - 4 full suites 2001 - 4 full suites 2002 - 4 full suites	Copper (dissolved) µg/L	varies by hardness (A&Ww chronic)	<2 - 9	1 of 23		Exceedance occurred during higher flow event.
			<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<1- 2300	3 of 23		
			Lead (total) µg/L	15 (FBC)	1 - 94	4 of 21		All exceedances coincide with higher flow events.
			Suspended sediment concentration (SSC) mg/L	80 (geometric mean) (A&Ww)	8 - 6410	Geo. means: 1998 = 174 1999 = 31 2001 = 46		Maximum base flow was calculated to be 729 cfs based on 30 years of flow data. Insufficient SSC data to calculate a geometric mean in 2000 or 2002.
			Turbidity (former standard) NTU	50 (A&Ww)	<1-10,000	7 of 24		Four of the exceedances coincide with higher flow events.
	Summary Row A&Ww Impaired FC Attaining FBC Impaired Agl Attaining AgL Attaining	1998-2002 24 sampling events	Copper (dissolved) µg/L	varies by hardness (A&Ww chronic)	<2 - 9	1 of 23 events	Inconclusive	USGS collected 24 samples in 1998 - 2002. Assessed as "impaired" due to <i>Escherichia coli</i> exceedances. EPA assessed this reach as also impaired due to sediment, using exceedances of the former turbidity standard as evidence of a narrative bottom deposit violation.
			<i>Escherichia coli</i> CFU	235 (FBC)	<1- 2300	3 of 23 events (in 1998 and 2000)	Impaired	
			Lead (total) µg/L	15 (FBC)	1 - 94	4 of 21	Inconclusive	Also placed on the Planning list due to: 1. Copper exceedances, 2. Lead exceedances, 3. SSC geometric mean exceedance, 4. Former turbidity standard exceedances. Monitoring will be scheduled to determine whether bottom deposit violations are occurring.
			Suspended sediment conc. (SSC) mg/L	80 (geometric mean) (A&Ww)	8 - 6410	1 of 3 annual geo. means	Inconclusive	
			Turbidity (former standard) NTU	50 (A&Ww)	1 - 10,000	7 of 24	Impaired	
K P Creek headwaters - Blue River AZ15040004-029 A&Ww, FC, FBC, AgL	ADEQ Ambient Monitoring Below K P Cienega UGOKP065.54 100888	1999 - 1 partial suite	No exceedances					(Sampled on same date as other site).

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	ADEQ Ambient Monitoring @ Blue River UG0KP000.08 100889	1999 - 1 partial suite 2000 - 3 partial suites 2002 - 1 full suite	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.2 - 8.9 (65 - 94%)	2 of 5		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment.
	Summary Row	1999 - 2002	No exceedances					ADEQ collected 6 samples at 2 sites in 1999-2002. Assessed as "attaining some uses" and placed on the Planning List due to missing core parameters: dissolved metals (copper, cadmium, and zinc) and total metals (mercury, lead, and copper).
	A&Wc Inconclusive FC Inconclusive FBC Attaining AgL Inconclusive	6 samples 5 sampling events						
San Francisco River headwaters - New Mexico border AZ15040004-023 A&Wc, FC, FBC, Agl, AgL	ADEQ Fixed Station Above Luna Lake UGSFR059.98 100381	1999 - 3 full suites 2000 - 2 full suites 2001 - 3 full suites 2002 - 2 full suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.6 - 9.5 (72 - 100%)	1 of 10		
			Turbidity (former standard) NTU	10 (A&Wc)	6 - 26	6 of 9		Two exceedances coincide with spring runoff flows.
	Summary Row	1999 - 2002	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	5.6 - 9.5 (72 - 100%)	1 of 10	Attaining	ADEQ collected 10 samples in 1999-2002. EPA assessed this reach as impaired due to sediment, using exceedances of the former turbidity standard as evidence of a narrative bottom deposit violation.
	A&Wc Impaired FC Attaining FBC Attaining Agl Attaining AgL Attaining	10 sampling events	Turbidity (former standard) NTU	10 (A&Wc)	6 - 26	6 of 9	Impaired	
San Francisco River New Mexico border - Blue River AZ15040004-004 A&Ww, FC, FBC, Agl, AgL	ADEQ Ambient Monitoring Near Martinez Ranch UGSFR017.66 100834	1999 - 1 partial suite 2000 - 1 full + 2 partial suites 2002 - 2 full suites	Turbidity (former standard) NTU	50 (A&Ww)	7 - 74	1 of 6		
	Summary Row	1999 - 2002	Turbidity (former standard) NTU	50 (A&Ww)	7 - 74	1 of 6	Inconclusive (see comment)	ADEQ collected 6 samples in 1999 - 2002. Assessed as "attaining some uses" and placed on the Planning List due to exceedance of the former turbidity standard. Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
	A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining	6 sampling events						
San Francisco River Blue River - Limestone Gulch AZ15040004-003 A&Ww, FC, FBC, Agl, AgL	ADEQ Fixed Station 6 miles above Clifton (below mining) UGSFR011.29 100708	1999 - 2 full + 2 partial suites 2000 - 3 full + 1 partial suite 2001 - 4 full suites 2002 - 5 full suites	<i>Escherichia coli</i> CFU/100 ml	235 (FBC)	<2 - 500	1 of 13		Exceedance occurred during summer monsoon event.
			Mercury µg/L	0.6 (FC)	<0.5 - 0.75	1 of 17		Note that the exceedance occurred in one of two split samples. The other split result was less than the lab reporting limit.
			Turbidity (former standard) NTU	50 (A&Ww)	1 - >999	3 of 16		Exceedances occurred during summer monsoon event.

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Ww Attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1999-2002 17 sampling events	Escherichia coli CFU/100 ml	235 (FBC)	<2 - 500	1 of 13 events (in 2002)	Inconclusive	ADEQ collected 17 samples in 1999-2002. Assessed as "attaining some uses" and placed on the Planning List due to Escherichia coli exceedance.
			Mercury µg/L	0.6 (FC)	<0.5 - 0.75	1 of 17	Attaining	
			Turbidity (former standard) NTU	50 (A&Ww)	1 - > 999	3 of 16	Attaining	
San Francisco River Limestone Gulch - Gila River AZ15040004-001 A&Ww, FC, FBC, Agl, AgL	ADEQ Fixed Station Below Clifton (below mining) UGSFR003.04 100382	1998 - 3 full + 1 partial suites 1999 - 3 full + 2 partial suites 2000 - 3 full + 1 partial suites 2001 - 4 full suites 2002 - 4 full + 1 partial suites	Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	<10 - 170	1 of 22		
				varies by hardness (A&Ww chronic)	<10 - 170	1 of 22		
			Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	5.2 - 10.3 (82 - 113%)	2 of 21		
			Escherichia coli CFU/100 ml	235 (FBC)	<2 - 545	1 of 17		Exceedance occurred during summer monsoon event.
			Lead (total) µg/L	15 (FBC)	<5 - 35	1 of 22		Exceedance occurred during summer monsoon event.
			Turbidity (former standard) NTU	50 (A&Ww)	<1 - > 999	4 of 21		Two samples were related to high flow events.
	Summary Row A&Ww Inconclusive FC Attaining FBC Inconclusive Agl Attaining AgL Attaining	1998 - 2002 22 sampling events	Copper (dissolved) µg/L	varies by hardness (A&Ww acute)	<10 - 170	1 of 22 events (in 2000)	Inconclusive	ADEQ collected 22 samples in 1998 - 2002. Assessed as "attaining some uses" and placed on the Planning list due to: 1. Copper exceedances, 2. Escherichia coli exceedances, 3. Former turbidity standard exceedances (reach was on the 2002 303(d) List due to turbidity). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.
				varies by hardness (A&Ww chronic)	<10 - 170	1 of 22	Inconclusive	
			Dissolved oxygen mg/L	> 6.0 (90% saturation) (A&Ww)	5.2 - 10.3 (82 - 113%)	2 of 21	Attaining	
			Escherichia coli CFU/100 ml	235 (FBC)	<2 - 545	1 of 17 events (in 2002)	Inconclusive	
			Lead (total) µg/L	15 (FBC)	<5 - 35	1 of 22	Attaining	
			Turbidity (former standard) NTU	50 (A&Ww)	1 - > 999	4 of 21	Inconclusive	
	Turkey Creek headwaters - Campbell Blue Creek AZ15040004-060 A&Wc, FC, FBC, AgL	ADEQ TMDL Program Above Campbell Blue (Site 1) UGTRY000.17 101180	2001 - 4 field	No exceedances				

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	Summary Row A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive	2001 4 sampling events	No exceedances					ADEQ collected four field samples in 2001. Assessed as "inconclusive" and placed on the Planning List due to missing core parameters: <i>Escherichia coli</i> , dissolved metals (cadmium, copper, and zinc), and total metals (mercury, copper, and lead).
LAKES MONITORING DATA								
Cluff Pond #3 AZL15040005-0370 A&Ww, FC, FBC, Agl, AgL	AGFD Routine Monitoring UGCRC - MID (mid lake)	2001 - 1 partial suite	No exceedances					
	Summary Row A&Ww Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive	2001 1 sampling event						Insufficient monitoring data to assess.
Dankworth Ponds AZL15040006-0440 A&Wc, FC, FBC	ADEQ Lakes Program UGDAN-A 100018	1999 - 1 partial suite 2000 - 3 partial suites	Dissolved oxygen mg/L	7.0 (90% saturation) (A&Wc)	4.4 - 8.1 (50 - 102%)	1 of 4		Low dissolved oxygen due to naturally occurring ground water upwelling, and not anthropogenic causes. Not included in the final assessment. Lab reporting limits for 3 other selenium samples were too high to use results for chronic standards assessment but sufficient for acute standards. Note that duplicate selenium sample did not exceed standards
			Selenium µg/L	2 (A&Wc chronic)	<5 - 25	1 of 1		
				20 (A&Wc acute)		1 of 4		
			Turbidity (former standard) NTU	10 (A&Wc)	1 - 27	1 of 2		
	ADEQ Lakes Program UGDAN-B 100987	1999 - 1 field	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	4.4 (50%)	1 of 1		
	ADEQ Lakes Program UGDAN-Spring 1 (pond) 100988	1999 - 1 partial suite 2000 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	3.5 - 3.95 (51 - 59%)	4 of 4		
	ADEQ Lakes Program UGDAN-Springs 2, 3, 4 100990, 100991, 100992	1999 - 1 partial suite (at 3 springs)	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	0.2 - 2.6 (2 - 42%)	3 of 3		
	Summary Row A&Wc Inconclusive FC Attaining FBC Inconclusive	1999 - 2000 12 samples 4 sampling events	Selenium µg/L	2 (A&Wc chronic)	<5 - 25	1 of 1 event	Inconclusive	ADEQ collected 12 samples at 4 sites in 1999-2000. Assessed as "attaining some uses" and placed on the Planning List due to: 1. Selenium exceedances, 2. Missing core parameters: <i>Escherichia coli</i> and dissolved metals (copper, cadmium, and zinc), 3. Former turbidity standard exceedance. Investigation into the causes and sources of turbidity will be scheduled during the next monitoring cycle for this watershed.
				20 (A&Wc acute)		1 of 4 events (in 2000)	Inconclusive	
			Turbidity (former standard) NTU	10 (A&Wc)	1 - 27	1 of 2	Inconclusive (see comment*)	
Luna Lake AZL15040004-0840 A&Wc, FC, FBC, AgL	AGFD Routine Monitoring UGLUN - A (dam site)	1998 - 3 partial suites	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	6.5 - 8.0 (87 - 99%)	1 of 3		
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.4 - 9.9	2 of 3		

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA

STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID	YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE					
			PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT	COMMENTS
	Alpine/Luna Lake Watershed Group 319 Project UGLUN-L1 (wildlife restricted area)	2001 - 4 field 2002 - 8 field	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	2 - 13.4 (22-152%)	5 of 9		
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.4 - 9.5	5 of 12		
	Alpine/Luna Lake Watershed Group 319 Project UGLUN - L2 (north of fishing dock)	2001 - 4 field 2002 - 8 field	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	2 - 11.8 (22-130%)	4 of 10		
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.7 - 9.5	4 of 12		
	Alpine/Luna Lake Watershed Group 319 Project UGLUN - L3 (3 meters above dam)	2001 - 4 field 2002 - 8 field	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	1.7 - 12.7 (18.6- 140%)	4 of 10		
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.6 - 9.6	5 of 12		
	ADEQ Lakes Program UGLUN-A (dam site) 100036	1999 - 1 partial suite 2002 - 1 partial suite	No exceedances					Note samples were taken on the same date at the two ADEQ sites.
	ADEQ Lakes Program UGLUN-B (mid lake) 100979	1999 - 1 partial suite 2002 - 1 partial suite	No exceedances					
	Summary Row A&Wc Not attaining FC Inconclusive FBC Not attaining AgL Not attaining	1998 - 2002 43 samples 18 sampling events	Dissolved oxygen mg/L	> 7.0 (90% saturation) (A&Wc)	1.7 - 13.4 (18.6 - 152)	14 of 43	Not attaining	A total of 43 samples were collected at 6 sites by ADEQ, AGFD, and the Alpine/Luna Lake Watershed Group (for a 319 implementation project) in 1998 - 2001. A nutrient TMDL to address pH and dissolved oxygen problems was approved by EPA in 2000. Assessed as "not attaining" due to low dissolved oxygen and pH exceedances.
			pH SU	6.5 - 9.0 (A&Wc, FBC, AgL)	8.4 - 9.93	16 of 43	Not attaining	Placed on the Planning List due to a fish kill in 1999. Fish kill may be evidence of a narrative standard violation. Also placed on the Planning List for TMDL-follow up monitoring and missing core parameters: turbidity, <i>Escherichia coli</i> , dissolved metals (copper, cadmium, zinc), and total metals (mercury, copper, and lead).
Roper Lake AZL15040006-1250 A&Ww, FC, FBC	ADEQ Lakes Program UGROP - A (dam site) 100080	1998 - 1 partial suites 2000 - 3 partial suites	No exceedances					
	ADEQ Lakes Program UGROP - B (mid lake) 100975	1999 - 1 suite 2000 - 1 suites	No exceedances					
	ADEQ Lakes Program UGROP - Pond 100976	1999 - 1 suite 2000 - 2 suites	No exceedances					
	ADEQ Lakes Program UGROP - Canal 100978	2000 - 3 suites	No exceedances					

TABLE 21. UPPER GILA WATERSHED – 2004 ASSESSMENT MONITORING DATA								
STREAM NAME SEGMENT WATERBODY ID DESIGNATED USES	AGENCY AND PROGRAM SITE DESCRIPTION SITE CODE ADEQ DATABASE ID		YEARS SAMPLED NUMBER AND TYPE OF SAMPLES	EXCEEDANCES OF STANDARDS BY SITE				
				PARAMETER UNITS	STANDARD (DESIGNATED USE)	RANGE OF RESULTS (MEAN)	FREQUENCY EXCEEDED STANDARD	DESIGNATED USE SUPPORT
	Summary Row		1998-2000	No exceedances				
	A&Ww	Attaining	12 samples					ADEQ collected 12 samples at 4 sites in 1998-2000. Assessed as “attaining some uses” and placed on the Planning List due to missing core parameter: <i>Escherichia coli</i> .
	FC	Attaining	5 sampling events					
	FBC	Inconclusive						

TABLE 22. UPPER GILA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
UPPER GILA WATERSHED -- STREAM ASSESSMENTS				
Ash Creek unnamed tributary at 32 45 37 / 109 52 22 - Gila River 15 miles AZ15040005-040B (Reach was split into warmwater and coldwater segments since last assessment. No current data in 040A.)	A&Ww Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (cadmium, copper and zinc).		
Blue River New Mexico border - KP Creek 21 miles AZ15040004-026	A&Wc Inconclusive FC Inconclusive FBC Attaining AgL Inconclusive AgL Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : total boron, dissolved metals (copper, cadmium, and zinc), and total metals (mercury, manganese, lead, and copper).		
Blue River KP Creek - Strayhorse Creek 4 miles AZ15040004-025A (Reach was split into warmwater and coldwater segments since last assessment.)	A&Wc Inconclusive FC Inconclusive FBC Attaining AgL Inconclusive AgL Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : total boron, total metals (mercury, manganese, lead, and copper), and dissolved metals (copper, cadmium, and zinc).		
Blue River Strayhorse Creek - San Francisco River 25 miles AZ15040004-025B (Reach was split into warmwater and coldwater segments since last assessment.)	A&Ww Attaining FC Attaining FBC Attaining AgL Attaining AgL Attaining Category 1 -- Attaining All Uses			
Bonita Creek Park Creek - Gila River 15 miles AZ15040005-030 Unique Water	A&Ww Attaining FC Attaining FBC Attaining DWS Attaining AgL Attaining Category 1 -- Attaining All Uses			
Campbell Blue Creek headwaters - Blue River 20 miles AZ15040004-028	A&Wc Inconclusive FC Attaining FBC Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameter</u> : dissolved copper.		
Cave Creek headwaters - South Fork of Cave Creek 8 miles AZ15040006-852A Unique Water (Reach was split into warmwater and coldwater segments since last assessment.)	A&Wc Impaired FC Attaining FBC Attaining AgL Attaining AgL Attaining Category 5 -- Impaired		Add selenium to the 2004 303(d) List due to chronic exceedances in 2 of 2 sampling events).	

TABLE 22. UPPER GILA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Cave Creek South Fork of Cave Creek - USFS boundary 2 miles AZ15040006-852B Unique Waters (Reach was split into warmwater and coldwater segments since last assessment.)	A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to former <u>turbidity</u> standard exceedance (1 of 9 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Cave Creek, North Fork headwaters - Cave Creek 6 miles AZ15040006-856	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Category 3 — Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Cave Creek, South Fork headwaters - Cave Creek 8 miles AZ15040006-849 Unique Water	A&Wc Attaining FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>Escherichia coli</u> exceedance (1 of 10 sampling events, occurred in 2000).		
Eagle Creek headwaters - unnamed tributary at 33 23 24 / 109 29 35 12 miles AZ15040005-028A (Reach was split into warmwater and coldwater segments since last assessment. No current data in 028B.)	A&Wc Inconclusive FC Inconclusive FBC Attaining DWS Inconclusive Agl Inconclusive AgL Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : total boron, total metals (mercury, arsenic, chromium, lead, manganese, and copper), and dissolved metals (copper, cadmium, and zinc).		
Eagle Creek Willow Creek - Sheep Wash 6 miles AZ15040005-027	A&Ww Attaining FC Attaining FBC Attaining DWS Attaining Agl Attaining AgL Attaining Category 1 -- Attaining All Uses			
Eagle Creek Sheep Wash - Gila River 25 miles AZ15040005-025	A&Ww Attaining FC Attaining FBC Attaining DWS Attaining Agl Attaining AgL Attaining Category 1 -- Attaining All Uses			
East Turkey Creek headwaters - unnamed tributary at 31 58 22 / 109 12 17 8 miles AZ15040006-837A (Reach was split into warmwater and coldwater segments since last assessment. No current data in 837B.)	A&Wc Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive Category 3 - Inconclusive	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Frye Canyon Creek headwaters - Frye Mesa Reservoir 5 miles AZ15040005-988A (Reach was split into warmwater and coldwater segments since last assessment. No current data in 988B.)	A&Wc Inconclusive FC Inconclusive FBC Attaining DWS Inconclusive Agl Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (copper, cadmium, and zinc) and total metals (mercury, arsenic, chromium, lead, and copper).		

TABLE 22. UPPER GILA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
Gila River New Mexico border - Bitter Creek 16 miles AZ15040002-004	A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>chronic selenium</u> exceedance (1 of 1 sampling event). Remove turbidity from Planning List as turbidity is attaining standards (no exceedances in 4 samples).		
Gila River Skully Creek - San Francisco River 15 miles AZ15040002-001	A&Ww Impaired FC Attaining FBC Inconclusive Agl Attaining AgL Attaining Category 5 -- Impaired	On the Planning List due to: 1. Low <u>dissolved oxygen</u> (1 of 9 samples). 2. <u>Lead</u> exceedance (1 of 8 samples).	Add <u>selenium</u> to the 303(d) List due to chronic selenium exceedances (3 of 3 sampling events).	
Gila River San Francisco River - Eagle Creek 3 miles AZ15040005-024	A&Ww Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List. No current monitoring data. Added to the Planning List in 2002 due to former <u>turbidity</u> standard exceedances (12 of 12 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Gila River Eagle Creek - Bonita Creek 10 miles AZ15040005-023	A&Ww Inconclusive FC Inconclusive FBC Inconclusive Agl Inconclusive AgL Inconclusive Category 3 -- Inconclusive	On the Planning List. No current monitoring data. Added in 2002 due to former <u>turbidity</u> standard exceedances (9 of 12 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		
Gila River Bonita Creek - Yuma Wash 6 miles AZ15040005-022	A&Ww Impaired FC Attaining FBC Impaired Agl Attaining AgL Attaining Category 5 -- Impaired	On the Planning List due to: 1. Copper exceedances (1 of 23 samples), 2. <u>Lead</u> exceedances (4 of 21 samples), 3. <u>Suspended sediment concentration</u> (SSC) geometric mean exceedance.	Add <u>Escherichia coli</u> to the 303(d) List due to exceedances in 2 of 8 sampling events. <u>Sediment</u> added to the 2004 303(d) List by EPA, using exceedances of the former turbidity standard (7 of 24 samples) as evidence of a narrative bottom deposit violation. <u>Delist turbidity</u> . The turbidity standard was repealed in 2002.	
K P Creek headwaters - Blue River 12 miles AZ15040004-029 Unique Water	A&Wc Inconclusive FC Inconclusive FBC Attaining Agl Inconclusive Category 2 -- Attaining Some Uses	On the Planning List due to <u>missing core parameters</u> : dissolved metals (copper cadmium, and zinc) and total metals (mercury, lead, and copper).		
San Francisco River headwaters - New Mexico border 13 miles AZ15040004-023	A&Wc Impaired FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 5 -- Impaired	Remove dissolved oxygen from the Planning List, as current data indicate that uses are being attained (only 1 of 10 samples did not meet the standard).	<u>Sediment</u> added to the 2004 303(d) List by EPA, using exceedances of the former turbidity standard (6 of 9 samples) as evidence of a narrative bottom deposit violation.	
San Francisco River New Mexico border - Blue River 21 miles AZ15040004-004	A&Ww Inconclusive FC Attaining FBC Attaining Agl Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to former <u>turbidity</u> standard exceedance (1 of 6 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.		

TABLE 22. UPPER GILA WATERSHED -- ASSESSMENT, PLANNING LIST, AND 303(d) STATUS TABLE

SURFACE WATER DESCRIPTION	2004 ASSESSMENT 5-CATEGORIES LAKE TROPHIC STATUS	2004 PLANNING LIST	STATUS OF 2002 303(d) LIST RECOMMENDATIONS FOR 2004 LIST	OTHER INFORMATION
San Francisco River Blue River - Limestone Gulch 19 miles AZ15040004-003	A&Ww Attaining FC Attaining FBC Inconclusive AgL Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to <u>Escherichia coli</u> exceedance (1 of 13 sampling events, occurred in 2002). Remove turbidity and beryllium from the Planning List. Data indicate that uses are being attained. Turbidity exceeded standards in only 3 of 16 samples. Arizona's beryllium standard was modified in 2002, and beryllium is not exceeding the new standards.		
San Francisco River Limestone Gulch - Gila River 13 miles AZ15040004-001	A&Ww Inconclusive FC Attaining FBC Inconclusive AgL Attaining AgL Attaining Category 2 -- Attaining Some Uses	On the Planning List due to: 1. <u>Copper</u> exceedance (1 of 22 sampling events, occurred in 2000). 2. <u>Escherichia coli</u> exceedance (1 of 17 sampling events, occurred in 2002). 3. Former turbidity standard exceedances (4 of 21 samples). Monitoring will be scheduled to determine whether suspended sediment or bottom deposit violations are occurring.	Delist turbidity. The turbidity standard was repealed in 2002. Add to the Planning List due to exceedances of the former standard.	
Turkey Creek headwaters - Campbell Blue Creek 5 miles AZ15040004-060	A&Wc Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive Category 3 — Inconclusive	On the Planning List due to missing core parameters: <u>Escherichia coli</u> , dissolved metals (cadmium, copper, and zinc), and total metals (mercury, copper, and lead).		
UPPER GILA WATERSHED -- LAKE ASSESSMENTS				
Cluff Pond #3 15 acres AZL15040005-0370	A&Ww Inconclusive FC Inconclusive FBC Inconclusive AgL Inconclusive AgL Inconclusive Category 3 — Inconclusive Trophic status not calculated	On the Planning List due to insufficient monitoring data to assess (only 1 sample).		
Dankworth Ponds 8 acres AZL15040006-0440	A&Wc Inconclusive FC Attaining FBC Inconclusive Category 2 -- Attaining Some Uses Trophic status -- Mesotrophic	On the Planning List due to: 1. <u>Selenium</u> exceedance (1 of 4 sampling events, occurred in 2000). 2. Former turbidity standard exceedance (1 of 2 samples). Investigation into the causes and sources of turbidity will be investigated during the next monitoring cycle for this watershed. 3. <u>Missing core parameters: Escherichia coli</u> and dissolved metals (copper, cadmium, and zinc).		
Luna Lake 120 acres AZL15040004-0840	A&Wc Not attaining FC Inconclusive FBC Not attaining AgL Not attaining Category 4A -- Not Attaining Trophic status -- Eutrophic	On the Planning List for: 1. TMDL follow-up monitoring for low <u>dissolved oxygen</u> (14 of 43 samples) and <u>high pH</u> (16 of 43 samples). 2. <u>Missing core parameters: Escherichia coli</u> , turbidity, dissolved metals (copper cadmium, and zinc), and total metals (mercury, copper, and lead). 3. <u>Fish kill</u> in 1999.		Nutrient TMDL to address low <u>dissolved oxygen</u> , high pH, and recurrent fish kills was approved by EPA in 2000. Placed on the Planning List in 2002 for TMDL follow-up monitoring. Fish kill in 1999 due to algal bloom die-off and associated high pH and low dissolved oxygen. This may be evidence of a narrative nutrient standard violation.
Roper Lake 25 acres AZL15040006-1250	A&Ww Attaining FC Attaining FBC Inconclusive Category 2 -- Attaining Some Uses Trophic status -- Mesotrophic	On the Planning List due to <u>missing core parameter: Escherichia coli</u> .		